A Report on
Missouri's Economic Condition

July 2003

MISSOURI ECONOMIC RESEARCH & INFORMATION CENTER

A Report on Missouri's Economic Condition

Recent signs in Missouri's economy point to a weathering and recovery from the effects of the lingering national recession. Among these indicators are low unemployment, comparisons of private sector employment change, above average personal income growth, record business activity, more stability in the state's manufacturing sector and predictions for better U.S. economic growth in the second half of this year.

Even with the positive signs that we are seeing, there are still problems associated with our economy, particularly as it relates to the state budget. It will take some time for state and local tax revenues to reflect an improved economy. Likewise the significant loss of state government jobs has been a drag on the economy.

However, the latest data reveal that Missouri's economy is fundamentally sound and showing signs of improvement.

National Recession

The economic downturn that began in the U.S. in March 2001 (or slightly earlier according to one recent analysis[1]) was initially mild and appeared to be short in duration. There was even evidence that the economy was poised to begin recovering around September. (Had it done so, the downturn might not even have been long or deep enough to have been formally designated as a recession.)

The events of September 11 sent the economy spiraling downward and set in motion forces that eliminated any hope of an early turnaround. Travel-related industries, in particular, have still not recovered from that blow. As it turns out, this was only the first of a group of external shocks that have prevented any consistent economic recovery from taking hold.

The second blow to hit the economy was the wave of corporate scandals, starting with the Enron bankruptcy. These events badly damaged investor confidence. How could a prudent investor know how to value a stock, when the company's financial statements could not be trusted? The subsequent plunge in stock values had multiple effects. Consumption was probably reduced as a result of the wealth effect. Tax collections fell as there was less securities-related income to tax. Brokerages and other financial industries were forced to cut back.

The gloomy picture took its toll on overall consumer confidence as well. Other than automobiles (where low interest rates and generous incentives kept sales strong), consumer spending was lackluster at best. Sales remained strongest at value-related retailers, and department stores and other high-end retailers generally suffered, most recently with a weak 2002 holiday season.

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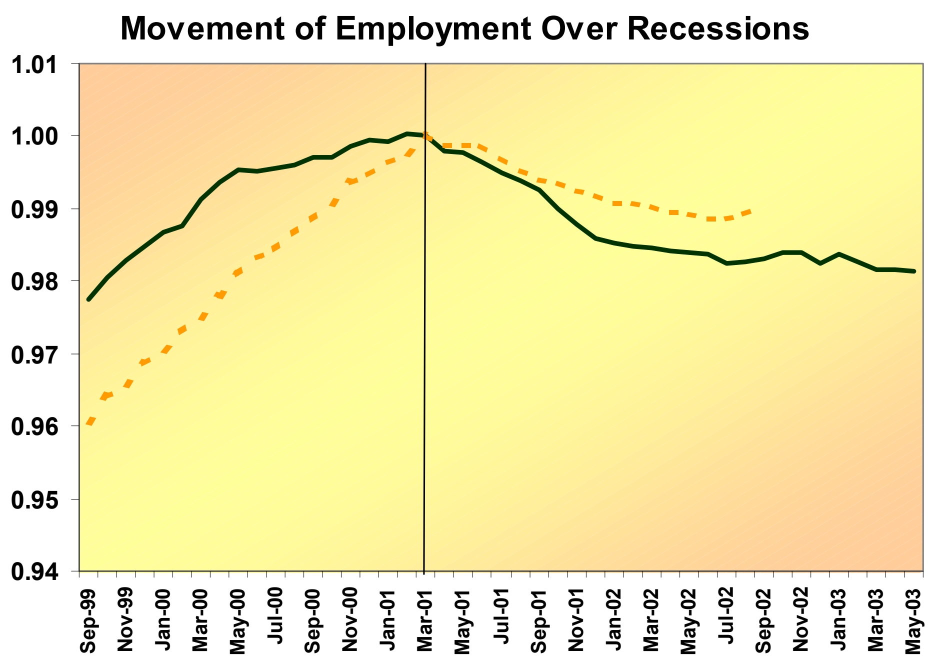
[1] Mike Iswalt, "The Recession Dating Game," *Economy.com,* February 14, 2003.

The third shock was associated with Iraq. While the threat of war loomed over the U.S., both consumers and businesses remained gloomy. Businesses, particularly, seemed unwilling to make major economic moves while the economic uncertainty was so great. Consumer confidence seemed very sensitive to developments in the war. Some initial news suggesting that the war might be longer than expected caused a drop in confidence, while the subsequent early end to hostilities led to sharp improvement. This does not seem to have been a complete turning point, however.

The economy has limped forward, with some production measures showing reasonable gains. However, these gains have not been translated into increased employment (increased productivity has generally allowed businesses to increase output without adding workers). This lack of employment growth (and indeed the ongoing existence of layoffs) has led to the increasing use of the term “jobless recovery.” With 2.5 million U.S. jobs gone since the start of the national recession, this period of sustained employment decline represents the longest in modern history.



The dark line shows the movement of employment in 1999-2003 and the dotted line the average over the previous 6 national recessions.

Source: National Bureau of Economic Research

Our state has not been immune from the national recession. Like forty-two other states, Missouri has lost private sector employment over the downturn. Additionally, in the latest reporting period, Missouri has been one of just four states to reduce the size of its government sector.

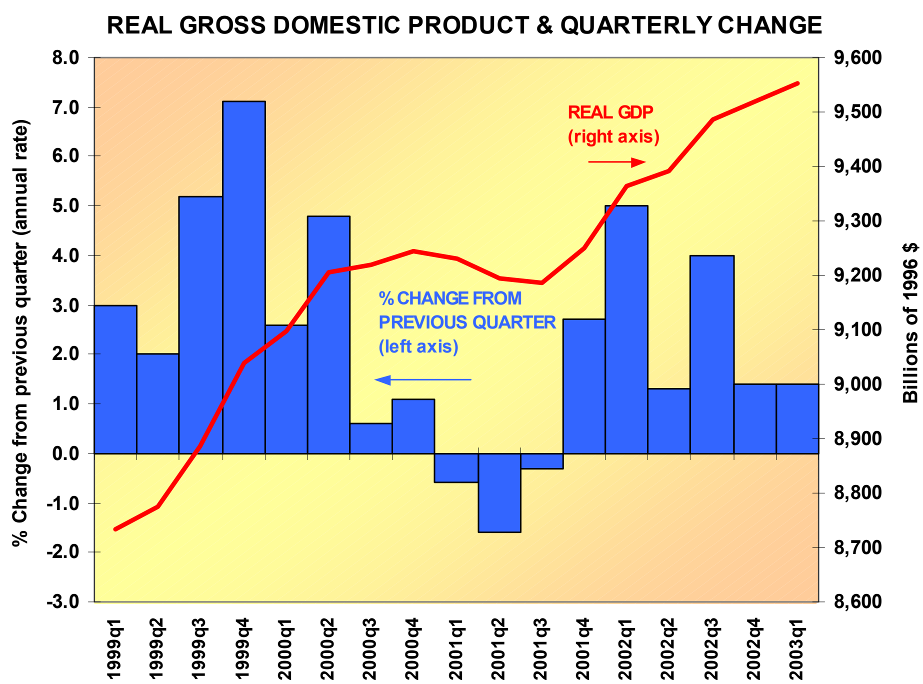
However total employment in the state has grown in April and May, giving hope that the corner has been turned.

Gross Domestic Product

As the effects of all the external shocks are peeled away from the nation's economy, sustained recovery sufficient to generate new jobs should begin.

Gross Domestic Product (GDP) is the broadest measure of economic conditions in the U.S. Although GDP is often used as a rule-of-thumb measure of recession (two consecutive quarters of declining activity is often thought to denote a recession) the National Bureau of Economic Research (NBER) does not rely heavily on this measure. It is not a chronologically-fine measure (being quarterly rather than monthly), and it is subject to considerable revisions.

Output has been expanding since late 2001, but there still does not seem to be pervasive recovery. GDP growth accelerated in the 1st quarter of 2002, but then slowed sharply in the 2nd quarter, dipping to a 1.3 percent annual rate. Growth picked up again in the 3rd quarter, giving some hope that sustained recovery was beginning. In the most recent two quarters (through the first quarter of 2003), the economy has managed growth at an annual rate of just 1.4 percent in each quarter. (The 1st quarter data have just been revised downward, so that the growth rate is lower than either of the two previous estimates for this quarter.)



Source: U.S. Bureau of Economic Analysis

On the positive side, a growing number of economists now predict 3 to 4 percent growth for the U.S. economy for the rest of the year, which should be high enough to produce sustained and solid job growth.[2]

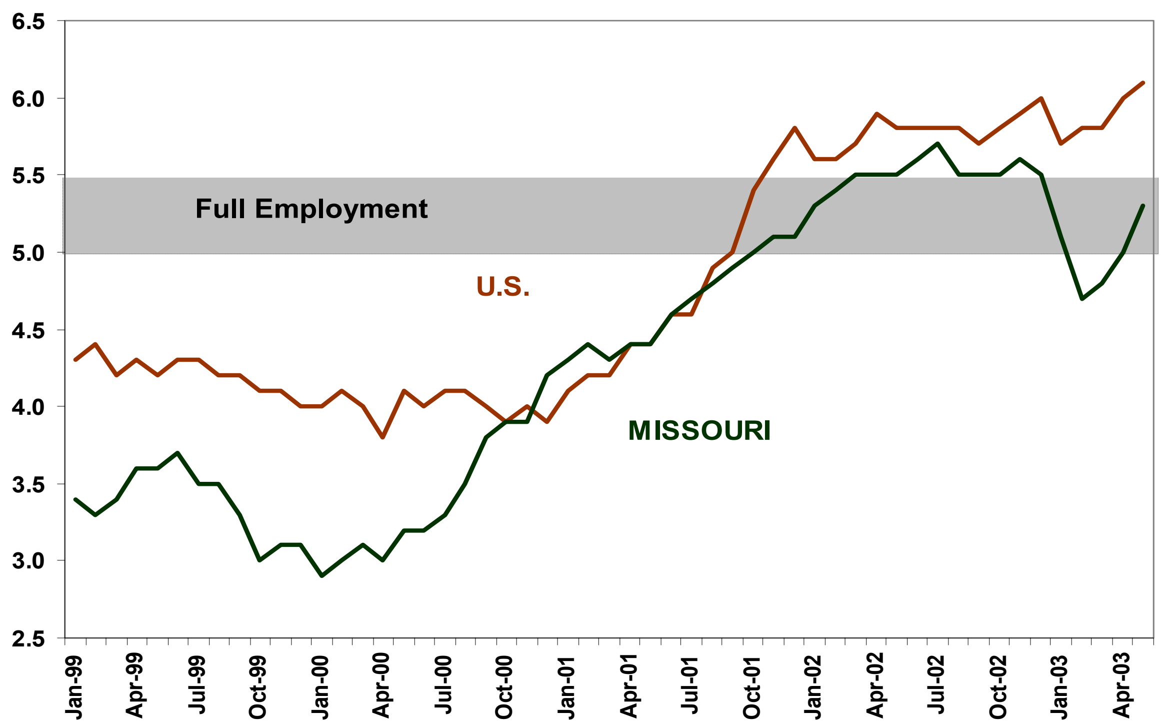
[2] See Irwin Kellner, "Darkest Before Dawn," *Economy.com*, June 24, 2003 and Rex Nutting, "Show me time for the economy", *CBS.MarketWatch.com*, June 27, 2003.

Economic Indicators

Unemployment

Missouri's unemployment rate has been consistently below the U.S. rate. The state's rate peaked in July 2002 at 5.7 percent. The rate dropped sharply in January and February of 2003, only to edge up in the next three months. The current rate -- 5.3 percent in May -- is a bit lower than it was a year ago and at the peak of July 2002. About 11,300 fewer Missourians are unemployed now than last July. The national rate has generally moved upward, dropping off some early in 2003 but then moving back up to 6.1 percent in May, the highest since 1994.

U.S. AND MISSOURI UNEMPLOYMENT RATE, SEASONALLY ADJUSTED

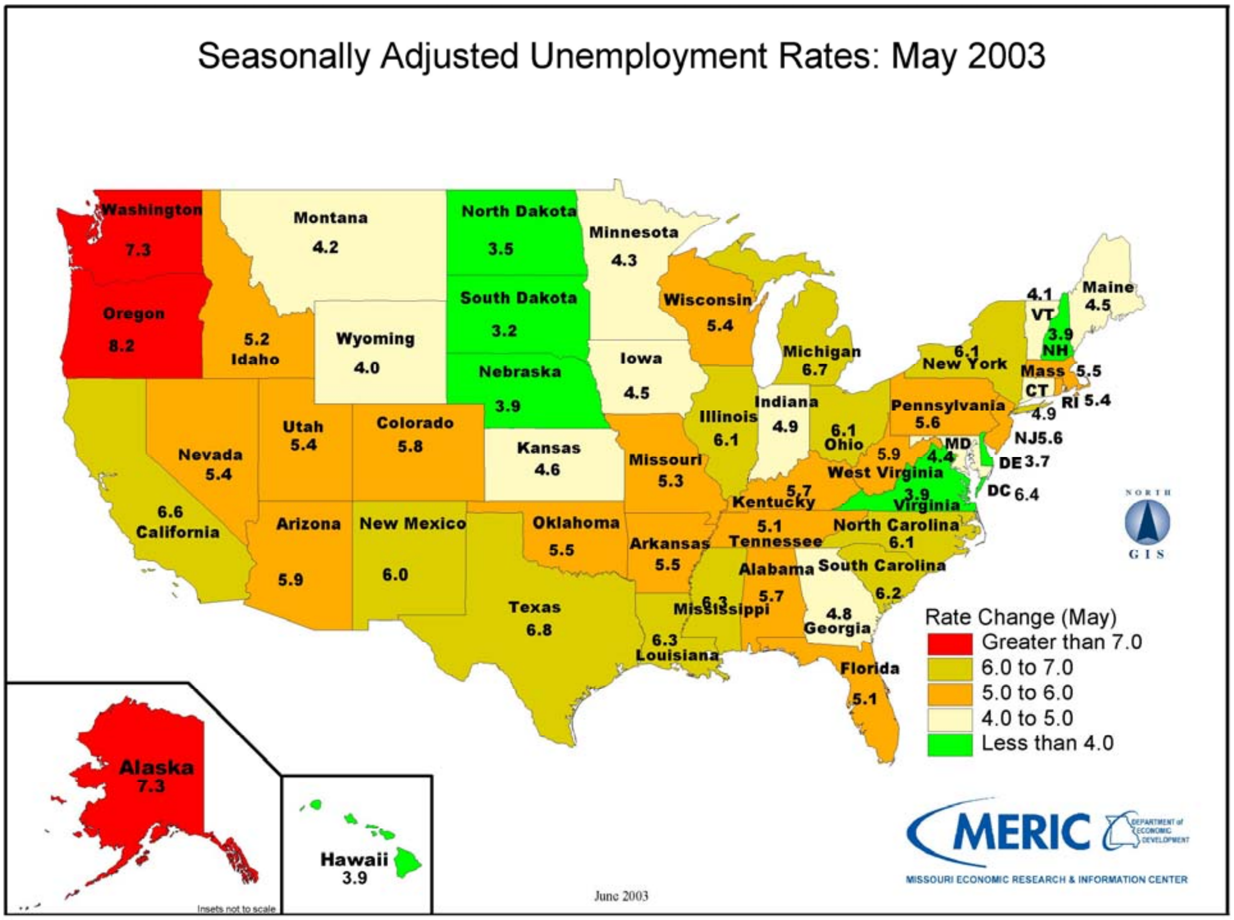


Source: U.S. Bureau of Labor Statistics

The unemployment rate is calculated by dividing the estimated number of unemployed people in the state by the civilian labor force.   The result expresses unemployment as a percentage of the labor force.

Labor force and unemployment estimates for states come from a cooperative statistical program between the U.S. Department of Labor Bureau of Labor Statistics (BLS) and the various states. (MERIC is the BLS affiliate in Missouri.) State data are developed using statistical models. The inputs to these models include monthly state-specific data from the Current Population Survey (CPS – a nationwide survey of households), Current Employment Statistics program (CES – survey of employers), and claims data from the unemployment insurance system.

Missouri's unemployment rate in May 2003 ranked 22nd lowest among the states and the District of Columbia.

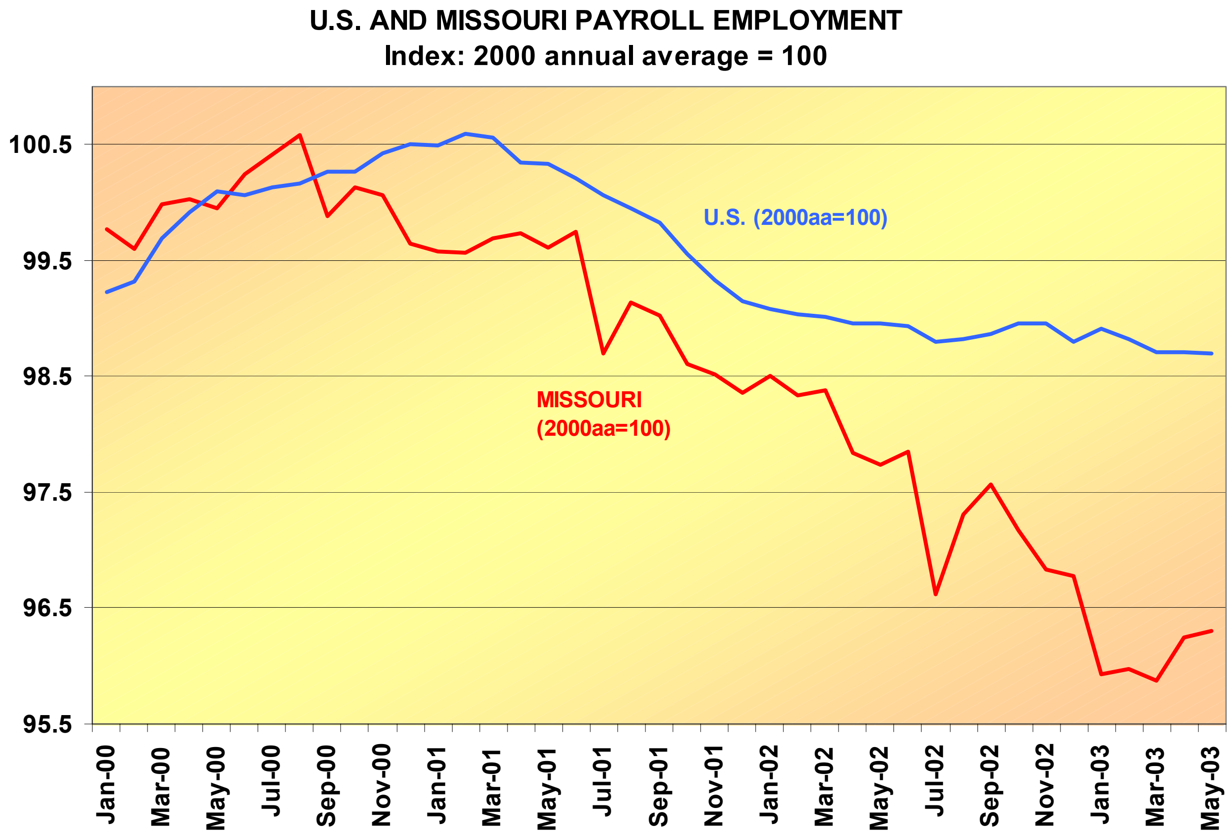


Source: U.S. Bureau of Labor Statistics

Employment

Payroll employment has fallen in most months since March 2001 for both the U.S. and Missouri. Employment at the national level appeared to have begun to stabilize in the summer of 2002. During the 3-month period beginning in August, there was accelerating job growth, totaling 204,000. This apparent harbinger of a recovering economy was followed by growing weakness. A month with some employment increase has tended to be followed by a month of falling employment.

Between August and January, nonfarm payrolls in the U.S. lost 109,000 jobs. Another 289,000 were lost over the most recent four months. Meanwhile, Missouri nonfarm payrolls countered the national trend in April and May of 2003. Missouri generated increases totaling nearly 12,000 in the two months. Once again, this bears some hope of being the beginning of relatively sustained growth in employment within the state.

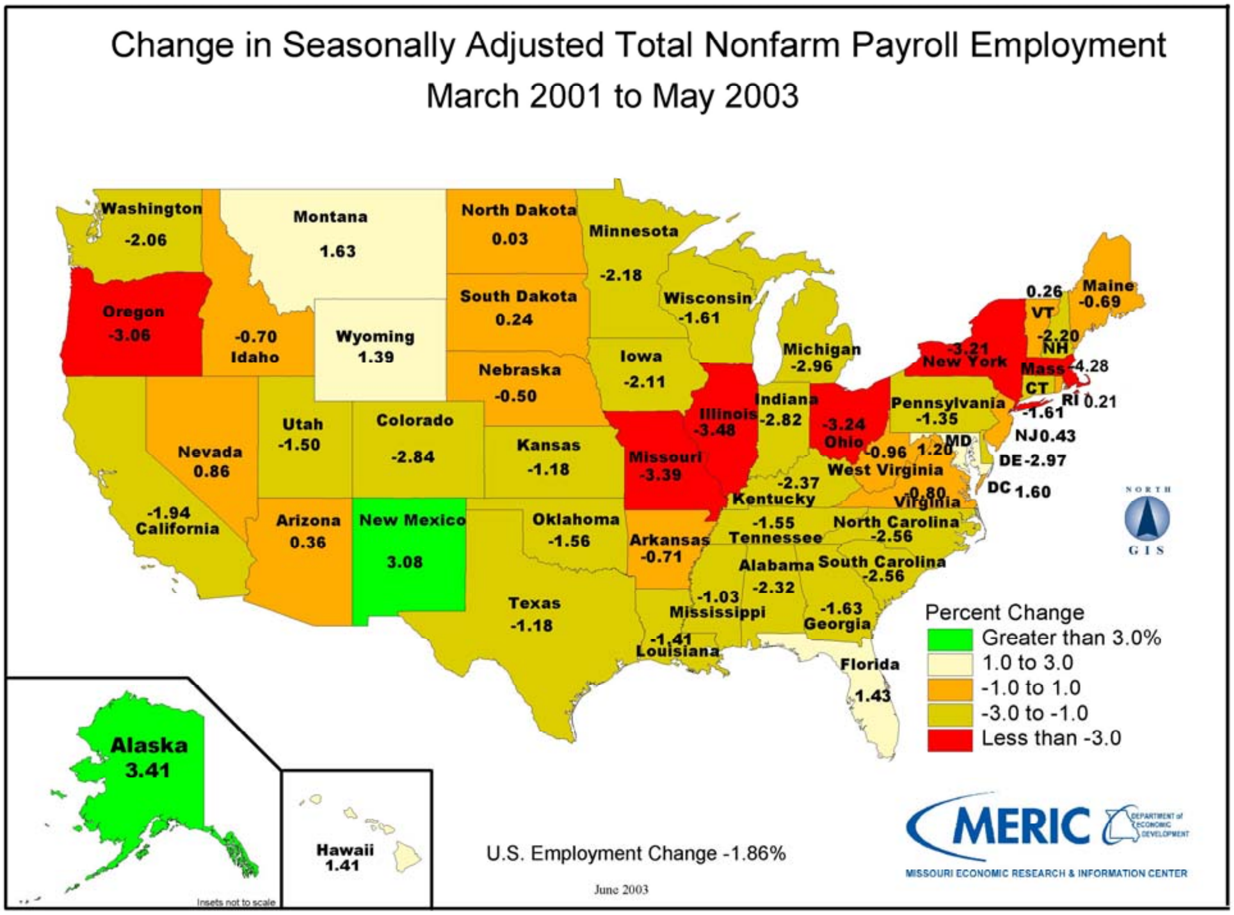


Source: MERIC and U.S. Bureau of Labor Statistics

Index numbers are used to indicate relative change, particularly over time. They are especially useful when comparing values where the magnitudes are significantly different. Many measures for Missouri are roughly 1/50 the size of the corresponding national measure. As an example, showing Missouri and national population change on the same chart would not be very useful, since the Missouri line would appear to be almost flat near the horizontal axis while the national line would show more change. To better compare, a base level for each variable is arbitrarily set at 100, and values are represented as a percentage of that base value.

The previous chart shows Missouri and U.S. nonfarm payroll employment data converted to index numbers, where the annual average value of each in the year 2000 is expressed as 100. (Index numbers for each observation are calculated by dividing their actual value by the 2000 annual average and multiplying by 100.) The chart shows Missouri employment decreasing more rapidly than national employment. Data for 2003 show Missouri employment to have dropped to about 96 percent of its value in the base year 2000, while national employment has remained at more than 98.5 percent of its 2000 value. Recently, Missouri employment has begun to increase, where national employment has remained flat.

Likewise, comparing Missouri's employment changes to other states continues to be a valuable way to analyze our state's economic condition. About 70 percent of the states have lower employment now than at the beginning of the recession (March 2001). The exceptions are generally smaller states; western, energy-producing states; or tourism-oriented states such as Florida, Hawaii, and Nevada that weathered initial downturns in the wake of the terrorist attacks.

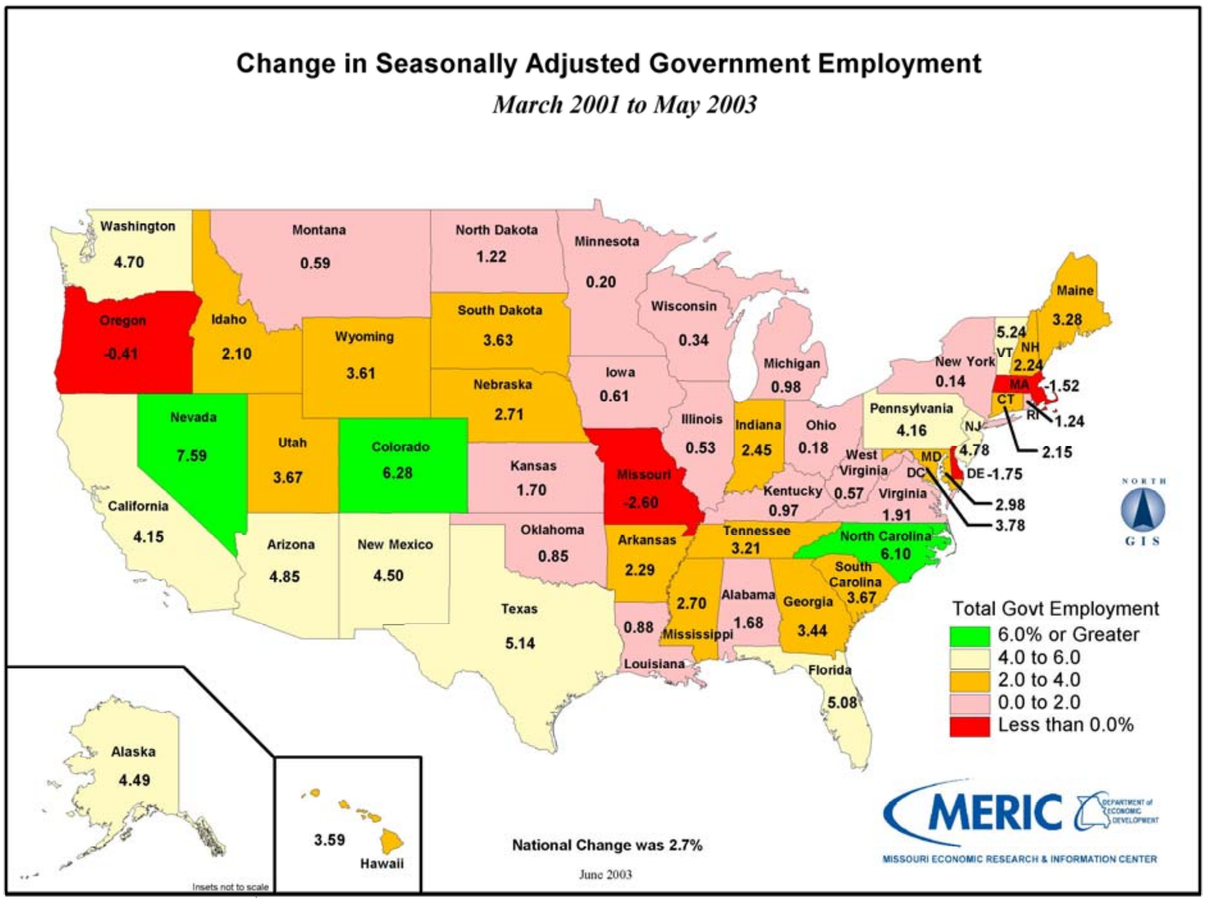


Source: U.S. Bureau of Labor Statistics

States more dependent on manufacturing were generally earlier and harder hit. Economic weakness in these states often spread to other sectors following prolonged periods of job loss in manufacturing.

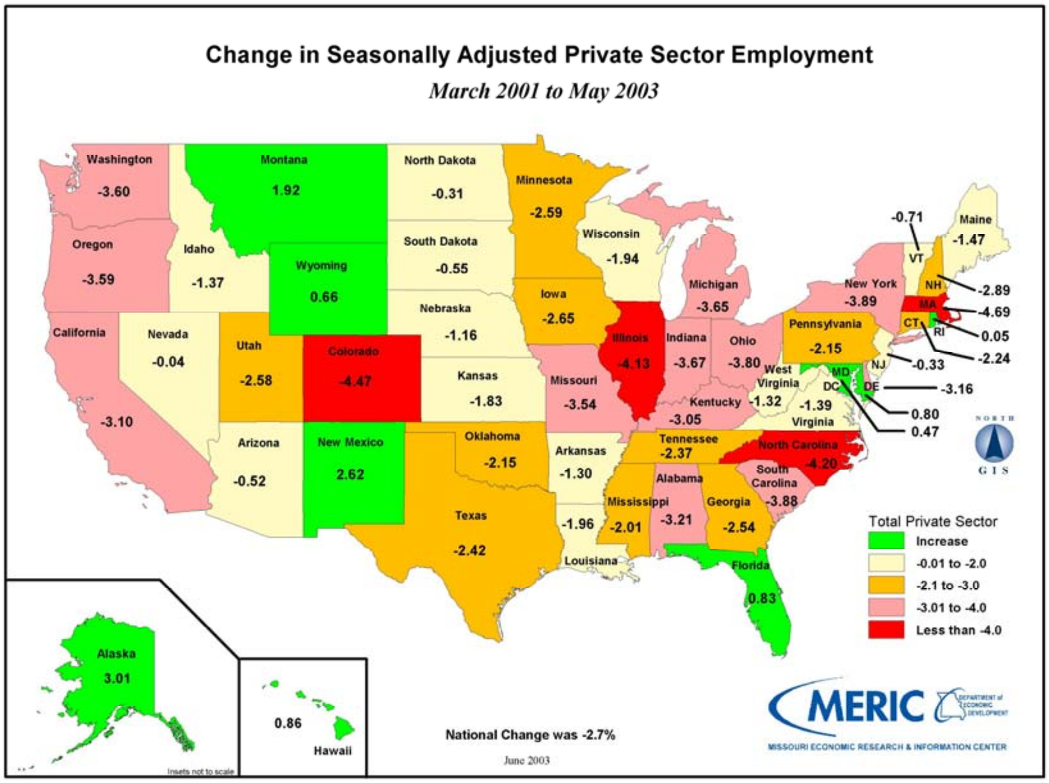
In Missouri, monthly employment reports have often mentioned job cuts in state government. State government employment in May 2003 is more than 20,000 jobs lower than it was at the beginning of the recession in March 2001. (These data are not seasonally adjusted since seasonally adjusted data are not available for state government employment.) Although not strictly comparable to the seasonally adjusted data used in the map below, it is obvious that this loss represents a substantial part of Missouri's cumulative employment drop of 93,000 jobs between March 2001 and May 2003.

The map below shows the percentage change in total government employment (federal, state, and local combined.) Although it might be expected that government employment was down in most states, on the strength of reported state government fiscal crises, such is not the case. Between March 2001 and May 2003, seasonally adjusted total government employment has increased in almost every state. Missouri is one of only four states where current employment is lower than it was at the beginning of the recession. In fact, its government employment decrease over that period was the largest of any state's, in both numerical and percentage terms: 11,000 jobs or 2.6 percent. This helps explain Missouri's large job losses during the recession.



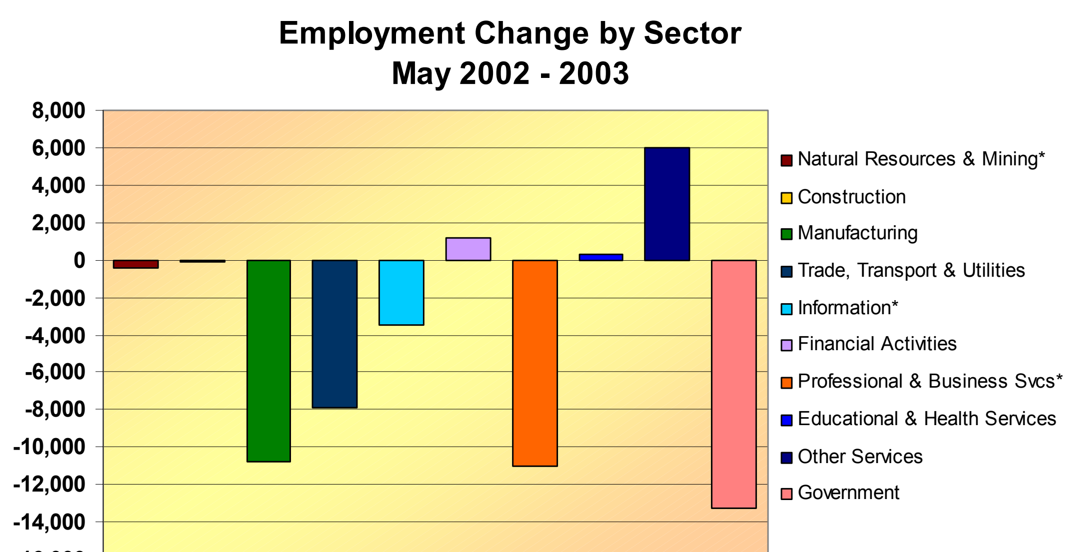
Source: U.S. Bureau of Labor Statistics

Looking at total private employment (total nonfarm less total government), a somewhat different picture emerges. Here, Missouri's percentage employment decrease since the beginning of the recession is less than in 11 other states and generally similar to states like Indiana, Michigan, Washington, Oregon, Alabama, California and Kentucky.



Source: U.S. Bureau of Labor Statistics

Over the past year (May 2002 – May 2003) the largest employment declines in Missouri were in government (almost exclusively state government), manufacturing, and business and professional services. There were few industry groupings with much employment growth. The major exception was the broad grouping of "other services," with growth primarily occurring in religious, grantmaking, civic, and professional organizations.



**Data in these sectors not seasonally adjusted.* *Leisure & Hospitality Services sector was unchanged.*

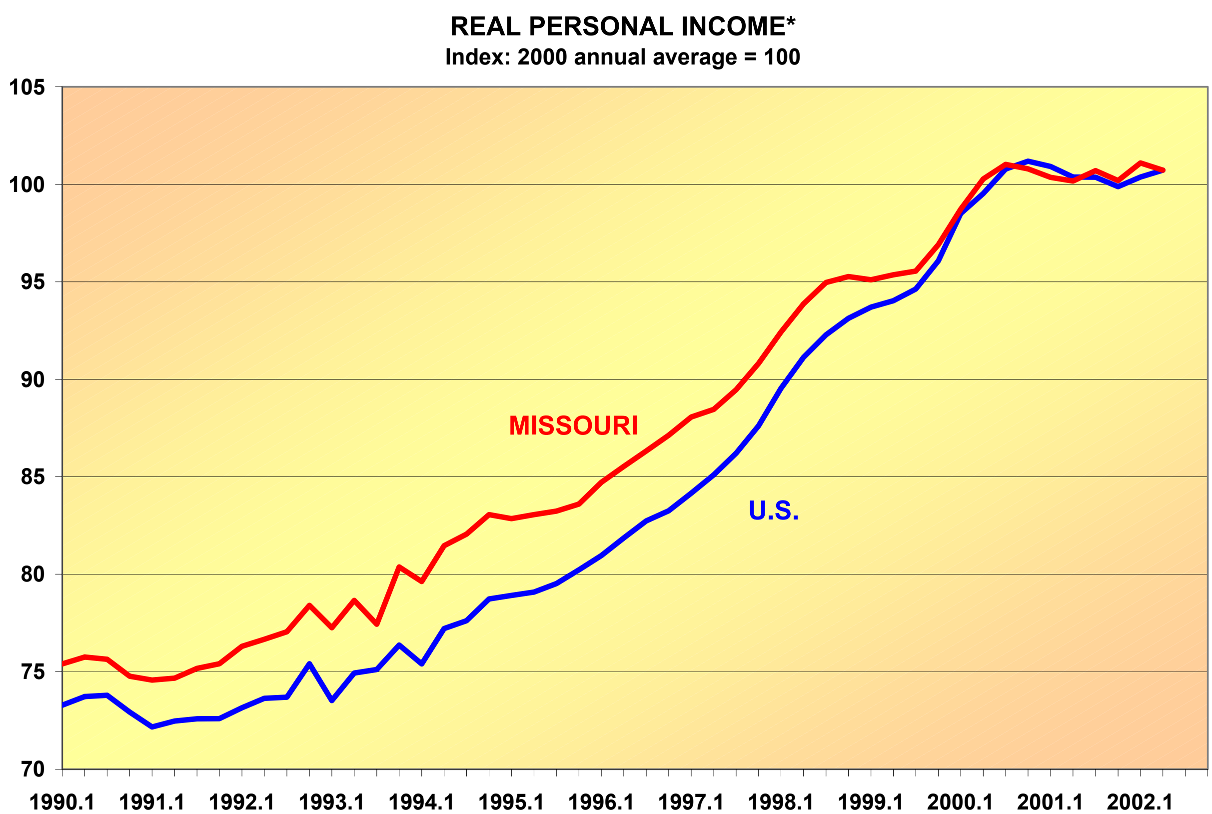
Source: MERIC and U.S. Bureau of Labor Statistics

Personal Income

Personal income is a broad measure of economic activity and one for which relatively current data are available, especially at the national level.

Personal income includes earnings; property income such as dividends, interest, and rent; and transfer payments, such as retirement, unemployment insurance, and various other benefit payments. It is a measure of income that is available for spending and is seen as an indicator of the economic well-being of the residents of a state. Earnings and wages make up the largest portion of personal income.

To show the vastly different levels of total personal income for the U.S. and Missouri on the same chart, these data have been converted to index numbers.



*Less transfer payments. 1996 dollars.

Source: MERIC and U.S. Bureau of Economic Analysis

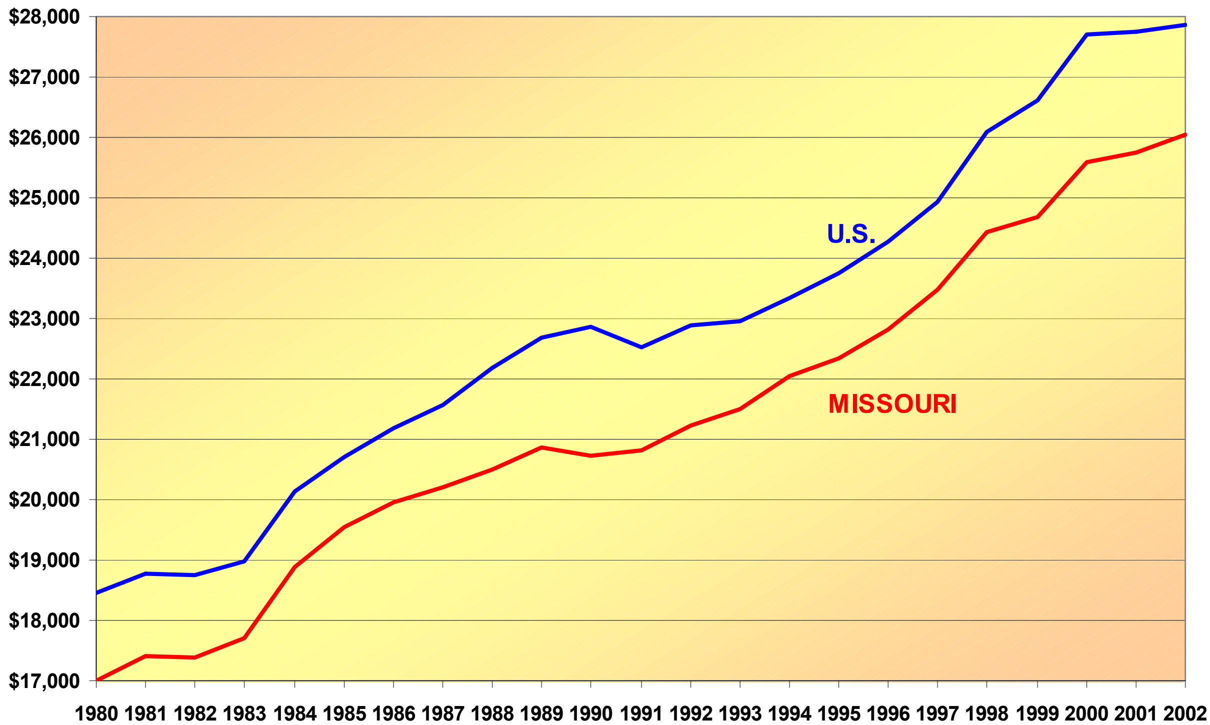
The above chart shows real personal income growth in Missouri compared to the U.S. The year 2000 has been selected as the base year. In the period since 2000 (generally reflecting the recession and a short period before), real personal income has essentially been flat in both Missouri and the U.S. There have been some periods of growth and some of decline. Missouri's personal income has generally moved similarly to that of the nation.

Although in 2002, Missouri's personal income growth rate of 3.2 percent was faster than the national rate of 2.8 percent.

Per capita personal income growth is also compared. Missouri's average income has historically been lower than the national average, but has not really slipped relative to the national average during the period shown.

Again, Missouri's per capita personal income growth in 2002 of 2.8 percent exceeded the national growth rate of 1.7 percent.

REAL PER CAPITA PERSONAL INCOME
U.S. and MISSOURI



Source: MERIC and U.S. Bureau of Economic Analysis

Missouri Business Activity

The Missouri Economic Research & Information Center, MERIC, recently completed its annual count of Missouri businesses for 2002. For the year Missouri reported an average of 155,973 businesses, up by 2,318 from 2001. The number of private businesses in Missouri has been rapidly increasing since 2000, becoming more inline with growth rates experienced in the mid 1990s.

While payroll and the average annual wage has been steadily increasing in the state, 2002 wage growth was somewhat slower at 1.9%, reflecting a more general nationwide trend.

Average Number of Missouri Firms 1990-2002

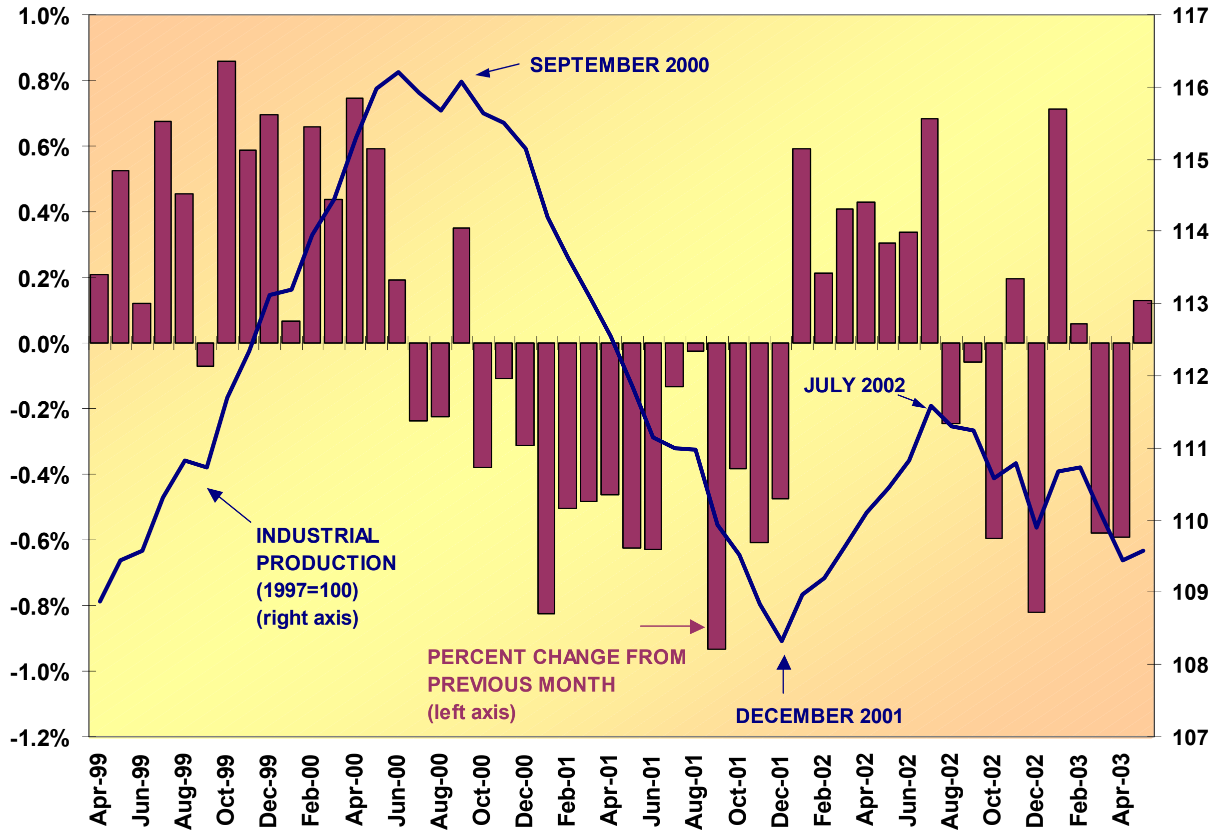
Year	Average Number of Firms	Change in Firms from Previous Year	Total Statewide Payroll (In Billions)	Change in Payroll From Previous Year (In Billions)	Average Annual Wage	% Change from Previous Year in Annual Wage
2002	155,973	2,318	73.70	0.62	$33,260	1.9%
2001	153,655	2,237	73.08	1.8	$32,635	3.2%
2000	151,418	118	71.28	3.79	$31,614	5.0%
1999	151,300	883	67.49	3.44	$30,098	3.8%
1998	150,417	3,563	64.05	3.71	$29,002	4.4%
1997	146,854	2,965	60.34	4.09	$27,791	4.7%
1996	143,889	2,864	56.25	2.96	$26,537	3.7%
1995	141,025	3,258	53.29	3.53	$25,602	4.6%
1994	137,767	3,026	49.76	3.14	$24,477	3.2%
1993	134,741	2,107	46.62	1.74	$23,711	1.3%
1992	132,634	538	44.88	2.55	$23,414	4.7%
1991	132,096	3,212	42.33	0.7	$22,359	4.0%
1990	128,884		41.63		$21,508	

Source: MERIC Covered Employment and Wage Program

Manufacturing & Industrial Vitality

Industrial production in the U.S. is a measure closely linked to the manufacturing sector. Industrial production began to drop after September 2000 and fell almost continuously for more than a year. The index did show a scant increase in July 2001, but any hopes of economic recovery were dashed by the events of September 11. Transportation, hotels, and retail trade all began to shed jobs quickly. Industrial production also resumed its downward trajectory; the 1.1 percent drop in the index in September 2001 was the largest monthly decrease since November 1990.

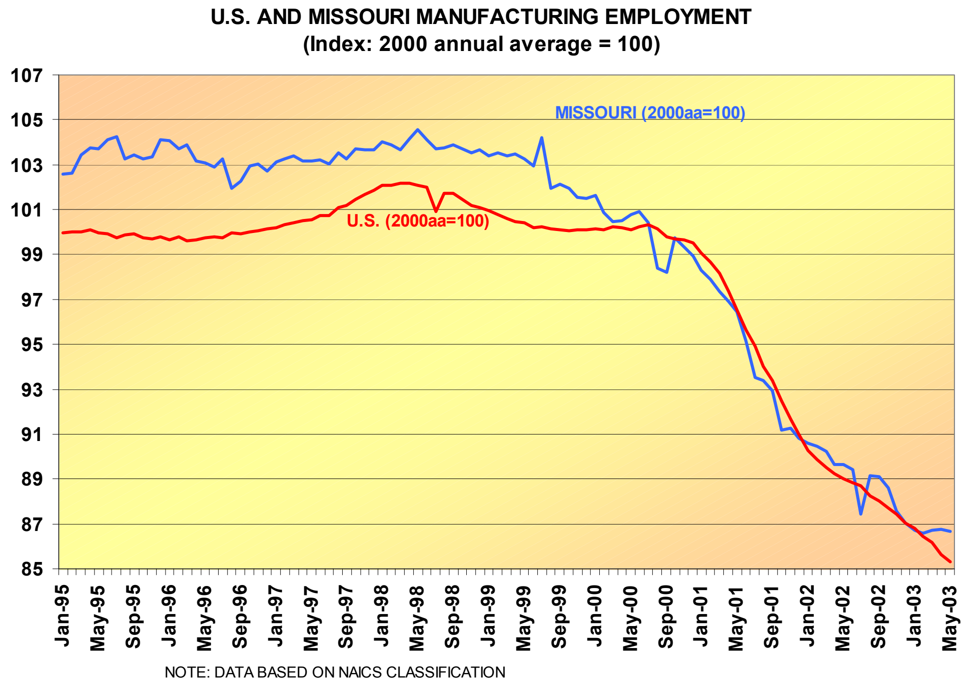
INDUSTRIAL PRODUCTION



Source: Federal Reserve Board

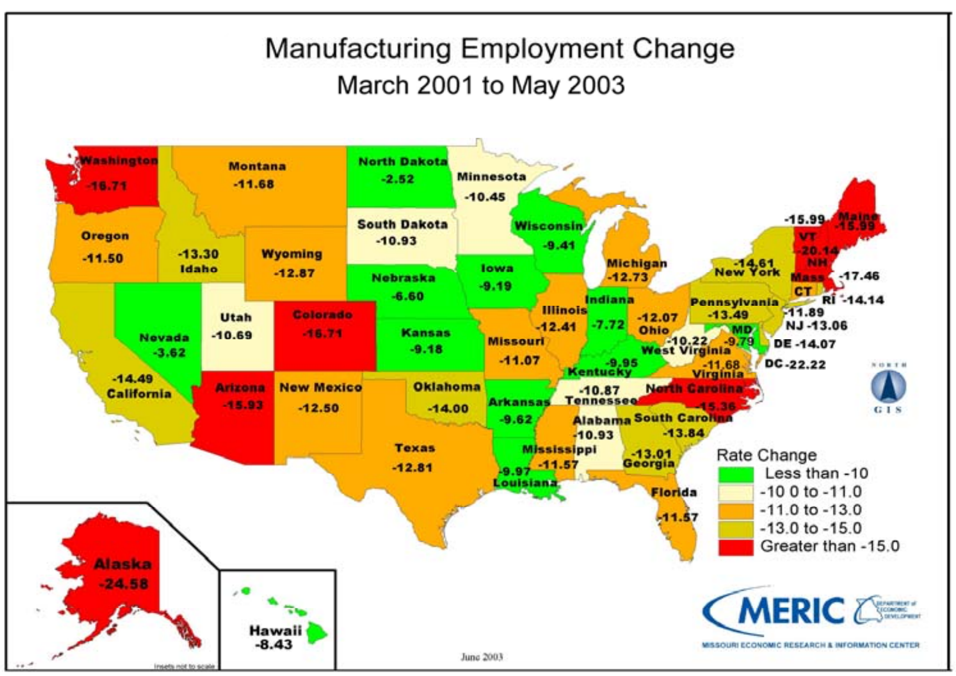
More recently, industrial production bottomed out in December 2001. A good gain in January 2002 was followed by smaller ones in February, March, and April. Production began to pick up again in May, June, and July, as overall economic conditions began to improve. This situation didn't last, however, as production began to slip again during the rest of the year, with only a brief respite in November. So far this year, there have been some months of increases and some of decreases. The current (May) index, at 109.6 percent of its 1997 level, is about what it was in March 2002 and about 1.3 percent above the December 2001 trough.

Manufacturing employment should move somewhat consistently with industrial production, although there could be some lag before employment changes. Manufacturing employment has been falling in the U.S. and Missouri. Although slowing in the rate of job loss had given some hope that manufacturing employment was bottoming out, so far there has been no upturn. Improvements in manufacturing output have not been followed by employment gains, as manufacturers have apparently increased productivity. It may take a prolonged period of output growth before hiring resumes.



Source: MERIC and U.S. Bureau of Labor Statistics

The following map gives a picture of the decrease in manufacturing employment since the beginning of the recession in March 2001. Manufacturing employment has dropped by 12.7 percent across the U.S. Missouri's losses have been less – 11. 1 percent – as job cuts in Missouri manufacturing have eased in recent months. Among all the states, Missouri ranked 19th in manufacturing employment losses from March 2001 to May 2003.

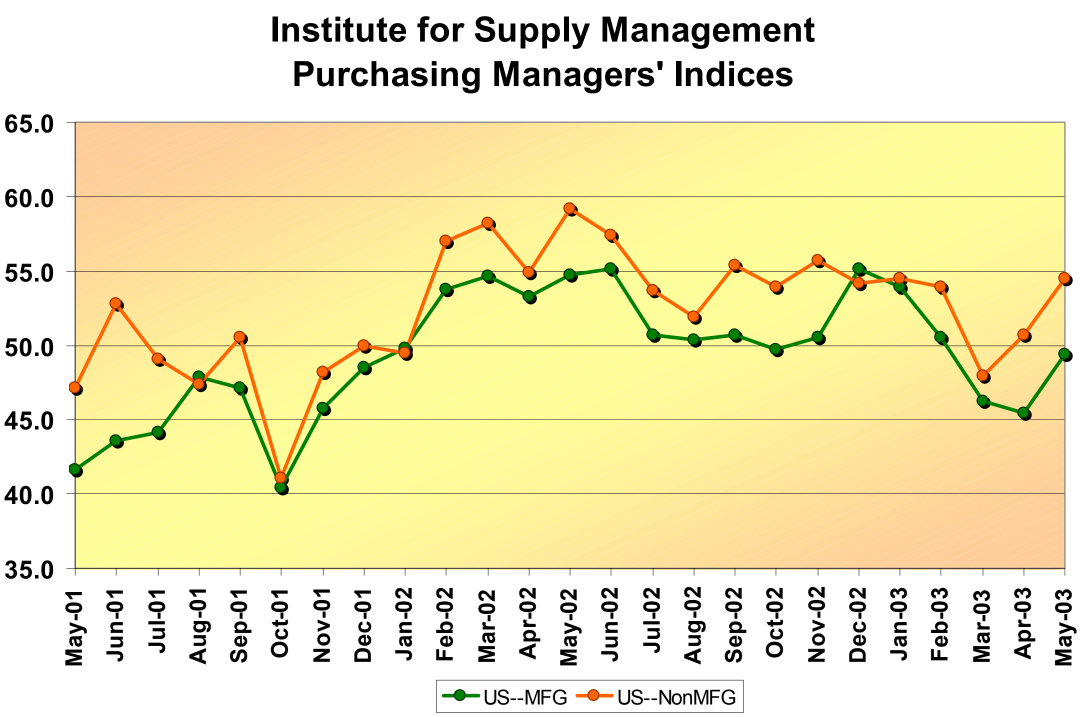


Source: U.S. Bureau of Labor Statistics

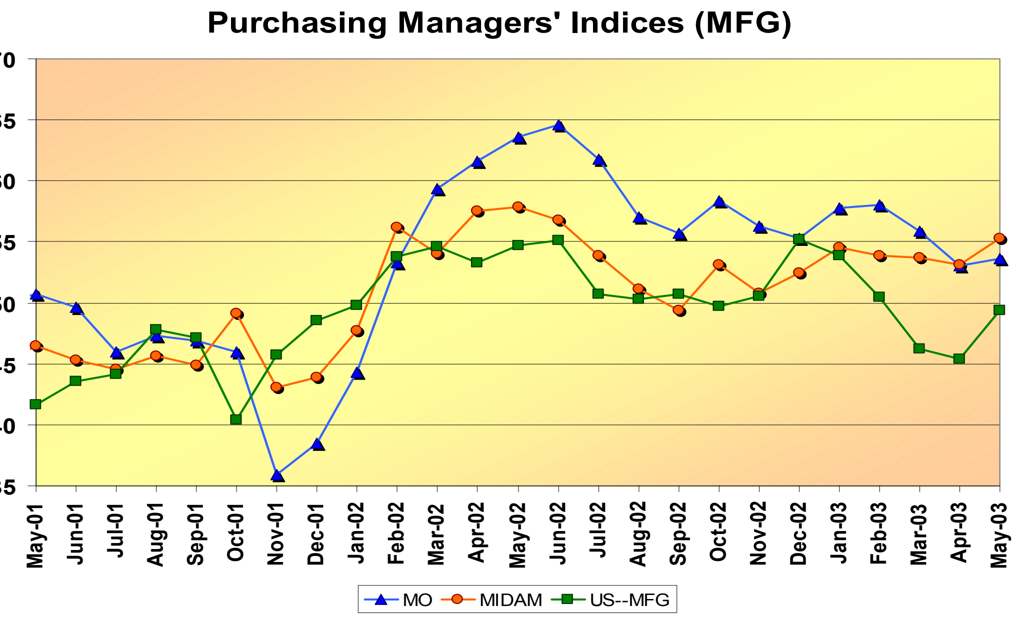
Purchasing Managers' Index

One leading index, Missouri's Purchasing Managers' Index (PMI), increased slightly in May. The state's PMI score increased from 53.0 in April to 53.6 in May, according to the monthly *Mid-American Business Conditions Survey*, conducted by Creighton University, Omaha, NE. Missouri's score has remained above the critical 50 mark for 16 consecutive months.

Economists consider the index, which measures such factors as new orders, production, supplier delivery times, backlogs, inventories, prices, employment, import orders and exports, a key economic indicator. Typically, a score greater than 50 indicates an expansionary economy, while a score below 50 forecasts a sluggish economy for the next three to six months.



The national PMI for manufacturing industries rose from 45.4 in April to 49.4 in May, slightly above economists' expectations. May's score indicates the contraction in U.S. manufacturing activity slowed during the month. The nation's PMI for non-manufacturing industries also increased in May, from 50.7 to 54.5. This marks the second consecutive monthly increase in this index. Although the manufacturing index remains below the 50 mark, the recent upward trend in these PMI indices is a hopeful sign for economic recovery.

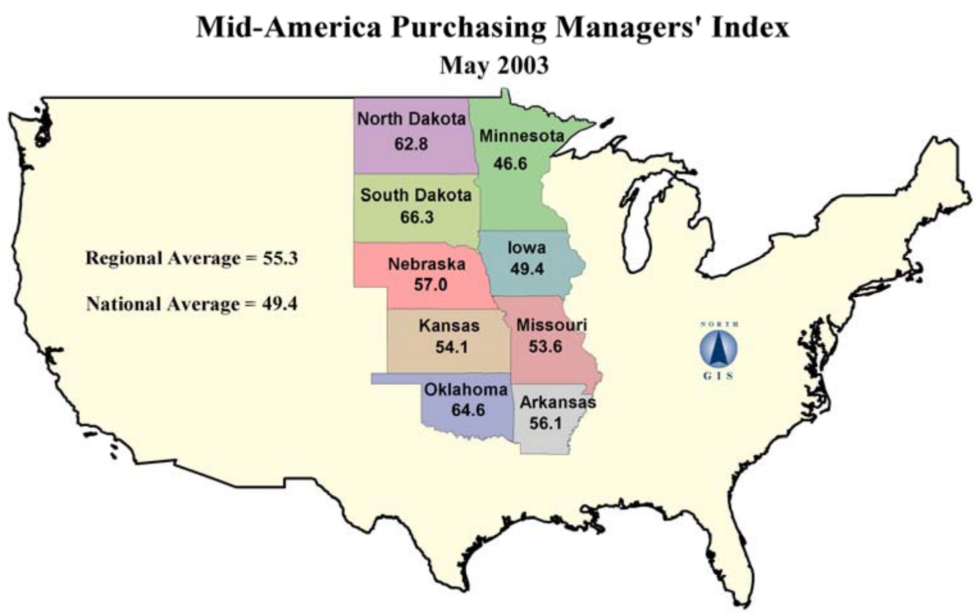


Source: Institute for Supply Management and Creighton University

Missouri's May PMI score was above 50 for the 16th straight month. Inventories (59.4), new orders (57.4) and production (54.7) contributed positively to the state's score.

Other states in the region with scores above 50 include South Dakota (66.3), Oklahoma (64.6), North Dakota (62.8), Nebraska (57.0), Arkansas (56.1) and Kansas (54.1). Iowa (49.4) and Minnesota (46.6) had scores below the 50 mark.

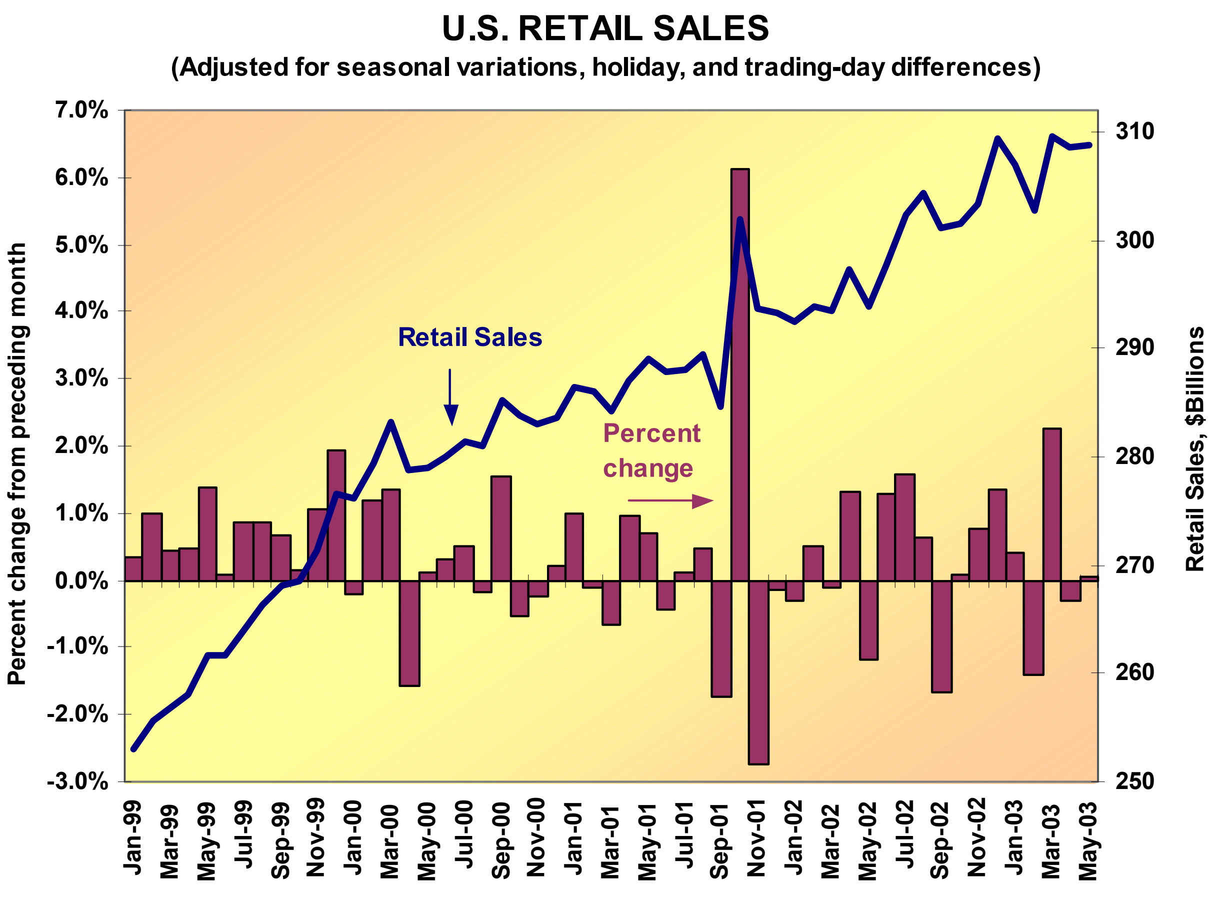
Overall, the average for the Mid-America Region was 55.3 in May, up 2.2 points from April.



Source: Creighton University, Mid-American Business Conditions Survey

Retail Trade and Taxable Sales

There have been considerable swings in retail trade so far this year, with weather, varying automobile sales and changing gasoline prices contributing to these swings. Sales in April and May have been fairly flat following a large increase in March. There was some good news behind the flat topside figure in the May data. Declining gasoline sales tended to mask sales increases elsewhere. Auto sales were down slightly, but core retail sales (other than autos and gasoline) were up at a 0.6 percent rate. Furniture, electronics, and clothing retailers contributed to the improvement.



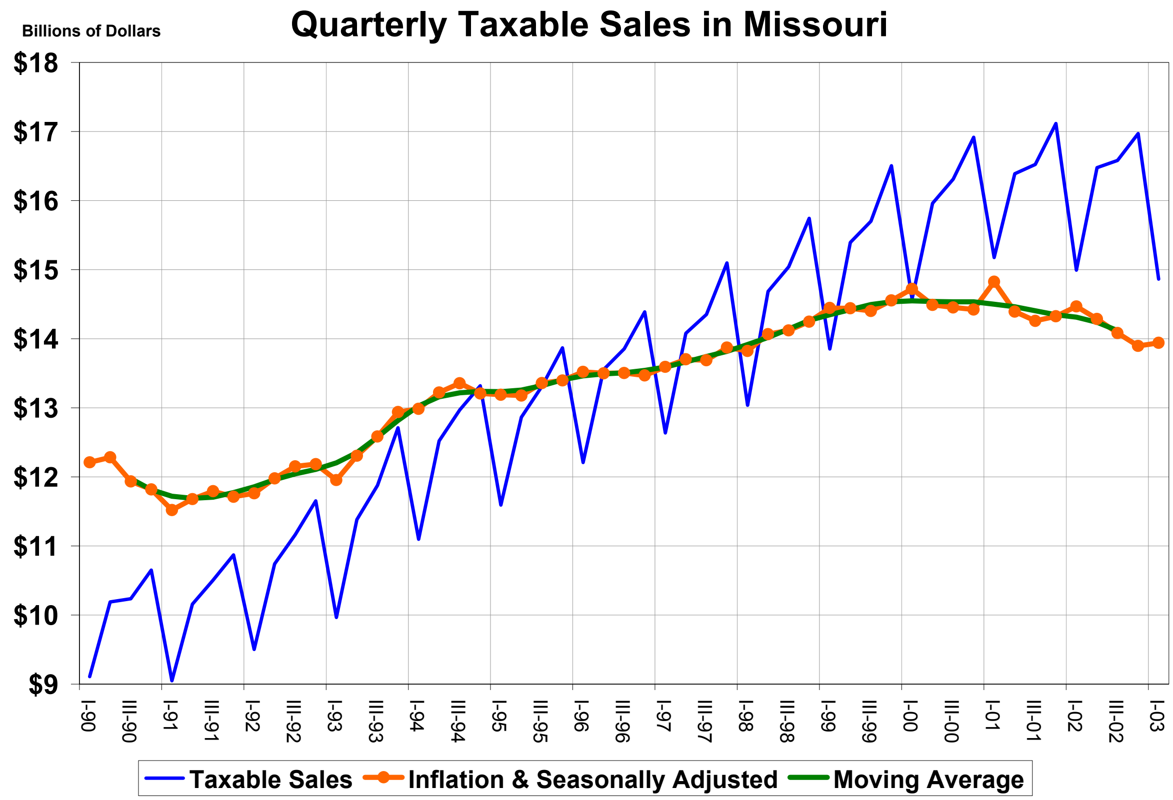
Source: U.S. Census Bureau

While no specific retail sales data are readily available for Missouri, total taxable sales as measured by the Missouri Department of Revenue (DOR) can serve as a proxy measure. Retail sales account for approximately 70% of taxable sales in Missouri, with an additional 10% from wholesale trade, 10% from service industries such as hotels and amusement parks, 5% from communications industries, and 5% from other industries.

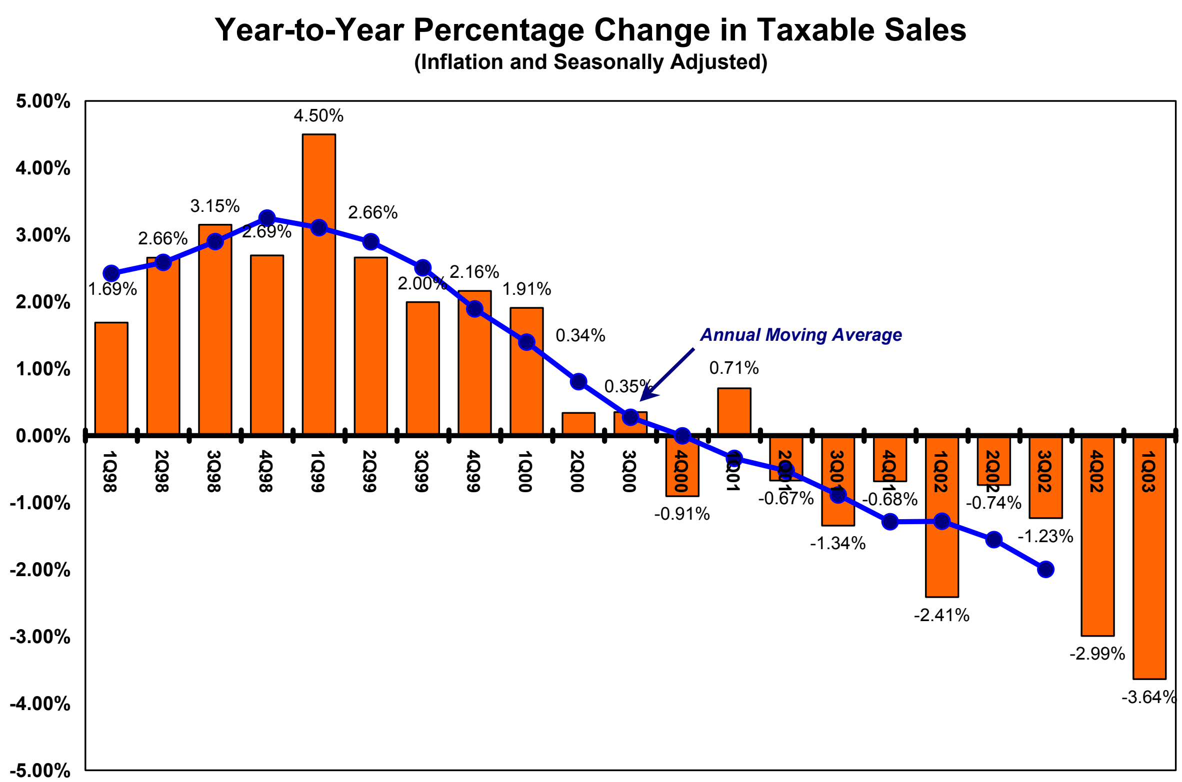
The Missouri Department of Revenue (DOR) recently released preliminary taxable sales estimates for the 1st quarter of 2003. Over this period, $14.9 billion in taxable sales occurred in the state, a decline of 0.88% in actual dollars from the same quarter of 2002.

Quarterly Taxable Sales in Missouri					
	Taxable Sales ($B)	% Change from Year Ago	Inflation & Seasonally Adjusted ($B-96)	% Change from Year Ago (Adjusted)
1Q99	13.9	6.24%	14.4	4.50%
2Q99	15.4	4.83%	14.4	2.66%
3Q99	15.7	4.39%	14.4	2.00%
4Q99	16.5	4.84%	14.6	2.16%
1Q00	14.6	5.21%	14.7	1.91%
2Q00	16.0	3.68%	14.5	0.34%
3Q00	16.3	3.87%	14.5	0.35%
4Q00	16.9	2.49%	14.4	**-0.91%**
1Q01	15.2	4.13%	14.8	0.71%
2Q01	16.4	2.68%	14.4	**-0.67%**
3Q01	16.5	1.32%	14.3	**-1.34%**
4Q01	17.1	1.18%	14.3	**-0.68%**
1Q02	15.0	**-1.19%**	14.5	**-2.41%**
2Q02	16.5	0.53%	14.3	**-0.74%**
3Q02	16.6	0.34%	14.1	**-1.23%**
4Q02	17.0	**-0.86%**	13.9	**-2.99%**
1Q03	14.9	**-0.88%**	13.9	**-3.64%**

Analysis by MERIC shows that if seasonal and inflationary effects are removed from the data, the negative trend in taxable sales continued during the 1st quarter. Adjusted taxable sales in Missouri during the 1st quarter of 2003 were at their lowest level since early 1998. Real year-to-year growth during the 1st quarter of 2003 stood at –3.64%. Revised data show that nine of the last ten quarters have seen negative real growth, while there has not been growth over 1% since the 1st quarter of 2000.



Quarterly Taxable Sales in Missouri
Billions of Dollars
$18
$17
$16
$15
$14
$13
$12
$11
$10
$9
I-90
III-90
I-91
III-91
I-92
III-92
I-93
III-93
I-94
III-94
I-95
III-95
I-96
III-96
I-97
III-97
I-98
III-98
I-99
III-99
I-00
III-00
I-01
III-01
I-02
III-02
I-03
Taxable Sales
Inflation & Seasonally Adjusted
Moving Average



Year-to-Year Percentage Change in Taxable Sales
(Inflation and Seasonally Adjusted)
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
-1.00%
-2.00%
-3.00%
-4.00%
-5.00%
1.69%
2.66%
3.15%
2.69%
4.50%
2.66%
2.00%
2.16%
1.91%
0.34%
0.35%
-0.91%
0.71%
-0.67%
-1.34%
-0.68%
-2.41%
-0.74%
-1.23%
-2.99%
-3.64%
Annual Moving Average
1Q98
2Q98
3Q98
4Q98
1Q99
2Q99
3Q99
4Q99
1Q00
2Q00
3Q00
4Q00
1Q01
2Q01
3Q01
4Q01
1Q02
2Q02
3Q02
4Q02
1Q03

Conclusions

The NBER has still not designated an economic trough – a month in which the U.S. recession ended and economic recovery began. NBER's Business Cycle Dating Committee has noted that:

> *the U.S. economy continues to experience growth in income and output but employment continues to decline. Because of the divergent behavior of various indicators, the NBER's Business Cycle Dating Committee believes that additional time is needed before interpreting the movements of the economy over the past two years.*[3]

There were three quarters in 2001 in which the economy shrank, according to GDP figures. Beginning with the 4th quarter of 2001, the economy has grown, albeit slowly and fitfully. By the 4th quarter of 2002, real GDP exceeded its previous peak (4th quarter of 2001). There has been growth in various measures of production, and in some ways the economy has not seemed too recessionary. Home building and buying and automobile production and sales are good examples. Yet despite what would have appeared to be the end of a short and not too deep recession well over a year ago, one of the key measures of economic activity and output – employment – has continued to fall.

Although GDP quickly recovered declines associated with the recession, employment is further from doing so. Current U.S. employment is nearly 2.5 million jobs or 1.9 percent below that of March 2001. Returning to pre-recession job levels will take some time. How long will depend upon the strength of the recovery in the U.S. economy and how quickly that translates into employment growth. National data show that there were 12-month periods as recently as 2000 in which employment growth exceeded the cumulative current decline. In the Missouri data series, there were 12-month periods in the recovery following the recession of the early 1990s in which percentage growth exceeded the 3.4 percent rate. But recovery is not likely to proceed at such rapid rates. The state government fiscal situation will also affect Missouri's employment recovery.

Finally, business confidence, which has been low for a long time, now seems to be improving. The Economy.com Survey of Business Confidence shows the highest levels of confidence since the survey began at the end of last year. Financial markets have generally improved. The Federal Open Market Committee has applied some additional monetary stimulus, and recently passed tax cuts should apply some fiscal stimulus. If the economy can avoid further shocks, more significant recovery should set in. As recovery proceeds and businesses become convinced it will last, production and employment should begin to grow.

[3] Statement of June 18, 2003.

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